

IN THE CLAIMS

1       1.       (original) A method comprising the steps of:  
2               receiving from a customer over a network an application for a credit card  
3       authorization, a non-migratable key, a first certificate by a Trusted Platform Module  
4       (TPM) identity associated with a computer system used by the customer, and a  
5       second certificate acquired by the computer system from a Certification Authority  
6       (CA);  
7               creating a public/private key pair and a third certificate in response to the  
8       receiving step; and  
9               sending the public/private key pair and the third certificate to the customer  
10       over the network.

1       2.       (original) The method as recited in claim 1, wherein after the sending step,  
2       the customer is capable of using the public/private key pair and the third certificate to  
3       make purchases over the network.

1       3.       (original) The method as recited in claim 1, wherein the TPM identity is a  
2       public/private key pair created as a result of a command by the customer input into  
3       the computer system.

1       4.       (original) The method as recited in claim 1, wherein the second certificate is  
2       created by the Certification Authority in response to receiving a third certificate  
3       signed by a manufacturer of the TPM and a public key of the TPM identity.

1       5.       (original) The method as recited in claim 4, wherein the third certificate is  
2       associated with an endorsement key of the TPM.

- 1       6.       (original) The method as recited in claim 1, wherein the network is the  
2       Internet.
- 1       7.       (previously presented) A method comprising the steps of:  
2               creating a TPM identity at a customer's computer system;  
3               obtaining, at the customer's computer system, a first certificate from a first  
4       server supporting a CA over a network;  
5               creating, at the customer's computer system, a non-migratable key; and  
6               transferring a credit card authorization application, the TPM identity, the non-  
7       migratable key, and the first certificate from the customer's computer system to a  
8       second server supporting a credit card company.
- 1       8.       (original) The method as recited in claim 7, further comprising the steps of:  
2               the second server supporting the credit card company creating a public/private  
3       key pair and a second certificate in response to the transferring step; and  
4               transferring the public/private key pair and the second certificate from the  
5       second server supporting the credit card company to the customer's computer system.
- 1       9.       (original) The method as recited in claim 8, wherein the step of transferring  
2       the public/private key pair and the second certificate from the second server  
3       supporting the credit card company to the customer's computer system is performed  
4       using a traditional mail service.
- 1       10.      (original) The method as recited in claim 8, wherein the step of transferring  
2       the public/private key pair and the second certificate from the second server  
3       supporting the credit card company to the customer's computer system is performed  
4       using the network.

1 11. (original) The method as recited in claim 8, further comprising the step of:  
2 a customer using the public/private key pair and the second certificate for  
3 commercial transactions over the network.

1 12. (original) The method as recited in claim 11, wherein the network is the  
2 Internet.

1 13. (original) The method as recited in claim 7, wherein the creating step further  
2 comprises creating a public/private key pair.

1 14. (original) The method as recited in claim 13, wherein the step of the  
2 customer's computer system obtaining the first certificate from the first server  
3 supporting the CA over the network further comprises the steps of:  
4 transferring from the customer's computer system to the first server supporting  
5 the CA a public portion of the public/private key pair created when the TPM identity  
6 is created and a third certificate associated with an endorsement key of the TPM;  
7 the CA checking an authenticity of the third certificate;  
8 the CA creating a fourth certificate for the TPM identity;  
9 the CA encrypting the fourth certificate;  
10 the CA bundling the encrypted fourth certificate with the public portion of the  
11 public/private key pair created when the TPM identity is created to create a first  
12 bundle; and  
13 the CA encrypting the first bundle with a public key of the third certificate to  
14 create a second bundle.

1 15. (original) The method as recited in claim 14, wherein the step of transferring  
2 the public/private key pair and the second certificate from the second server

3 supporting the credit card company to the customer's computer system further  
4 comprises the steps of:  
5 the TPM decrypting the second bundle with a private portion of the third  
6 certificate producing the first bundle; and  
7 the TPM decrypting the first bundle with a private portion of the  
8 public/private key pair created when the TPM identity is created.

1 16. (original) A computer program product adaptable for storage on a computer  
2 readable medium, comprising the program steps of:  
3 receiving from a customer over a network an application for a credit card  
4 authorization, a non-migratable key, a first certificate by a Trusted Platform Module  
5 (TPM) identity associated with a computer system used by the customer, and a  
6 second certificate acquired by the computer system from a Certification Authority  
7 (CA);  
8 creating a public/private key pair and a third certificate in response to the  
9 receiving step; and  
10 sending the public/private key pair and the third certificate to the customer  
11 over the network.

1 17. (original) The computer program product as recited in claim 16, wherein after  
2 the sending step, the customer is capable of using the public/private key pair and the  
3 third certificate to make purchases over the network.

1 18. (original) The computer program product as recited in claim 16, wherein the  
2 TPM identity is a public/private key pair created as a result of a command by the  
3 customer input into the computer system.

1       19.     (original) The computer program product as recited in claim 16, wherein the  
2       second certificate is created by the Certification Authority in response to receiving a  
3       third certificate signed by a manufacturer of the TPM and a public key of the TPM  
4       identity.

1       20.     (original) The computer program product as recited in claim 19, wherein the  
2       third certificate is associated with an endorsement key of the TPM.

1       21.     (original) A computer program product adaptable for storage on a computer  
2       readable medium, comprising the program steps of:  
3             creating a TPM identity;  
4             obtaining a first certificate from a CA;  
5             creating a non-migratable key;  
6             contacting a web site supporting a credit card company;  
7             sending to the web site an application for a credit card authorization, the TPM  
8       identity, the first certificate, and the non-migratable key; and  
9             receiving from the web site a public/private key pair and a second certificate  
10       enabling the credit card authorization.

1       22.     (original) The computer program product as recited in claim 21, further  
2       comprising the program step of:  
3             conducting a commercial transaction over the Internet using the credit card  
4       authorization as enabled by the public/private key pair and the second certificate.

1       23.     (original) The computer program product as recited in claim 21, wherein the  
2       non-migratable key is a signing key.

1       24.     (original) The computer program product as recited in claim 21, wherein the  
2       non-migratable key is a storage key.

1       25.     (original) A system comprising:  
2             a server supporting a web site of a credit card company;  
3             a customer computer including a TPM;  
4             a network linked to the server and the customer computer;  
5             first software stored in memory in the customer computer for requesting the  
6       TPM to create a TPM identity;  
7             second software stored in memory in the customer computer for obtaining a  
8       first certificate over the network from a CA;  
9             third software stored in memory in the customer computer for creating a non-  
10       migratable key;  
11            fourth software stored in memory in the customer computer for browsing the  
12       web site of the credit card company over the network;  
13            fifth software stored in memory in the customer computer for sending an  
14       application for a credit card authorization to the web site of the credit card company  
15       over the network;  
16            sixth software stored in memory in the customer computer for sending to the  
17       web site of the credit card company over the network the TPM identity, the first  
18       certificate, and the non-migratable key;  
19            the web site of the credit card company creating a public/private key pair and  
20       a second certificate; and  
21            the web site of the credit card company sending the public/private key pair  
22       and the second certificate over the network to the customer computer.

1       26.     (previously presented) A system comprising:  
2             a memory;  
3             code stored in said memory;  
4             an adapter which communicates data to and receives data from a certificate  
5 server and a credit card application server;  
6             a Trusted Platform Module (TPM);  
7             a CPU, operatively coupled to said memory, said TPM, and said  
8 communications adapter, and which executes code stored in said memory;  
9             said CPU when executing said code effective in:  
10            creating a TPM identity;  
11            obtaining from said communications adapter a first certificate  
12 originating from said certificate server;  
13            creating a non-migratable key; and  
14            transferring a credit card authorization application, said TPM identity,  
15 said non-migratable key, and said first certificate to said credit card application  
16 server.

1       27.     (previously presented) Apparatus comprising:  
2             an adapter through which data is exchanged with a certificate server and a  
3 credit card application server, a Trusted Platform Module (TPM) which creates a  
4 TPM identity; a CPU coupled to said adapter and to said TPM and effective in:  
5             (1) obtaining from said adapter a first certificate originating from the  
6 certificate server;  
7             (2) creating a non-migratable key and transferring said non-migratable  
8 key, said TPM identity, said first certificate, and a credit card authorization  
9 application to the credit card application server.